REMARKS/ARGUMENTS

The final Office Action of December 19, 2006, has been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of the instant application are respectfully requested. Claims 81, 87, and 93 have been amended to further clarify the scope of protection. Claims 81-98 remain pending.

Claims 87-92 stand provisionally objected to under 37 CFR 1.75 as being a substantial duplicate of pending claims 81-86. Applicants disagree with the assertion that claims 87-92 are duplicates or else are so close in content with claims 81-86 that they both cover the same thing, despite a slight difference in wording. Specifically, and for example with respect to claims 81 and 87, the two independent claims do not share common scope for each claim. Applicants' claim 81 recites, among other features, "identifying at least one predicate **_and argument_** in said set of document predicate structures" (emphasis added). In comparison, Applicants' claim 87 recites, among other features, "identifying at least one predicate in said set of document predicate structures." As such, Applicants' claim 87 does not include the feature of identifying at least one argument in said set of document predicate structures. As Applicants' original written description describes, a predicate and an argument are not the same thing or a difference in wording. (E.g., see p. 13, ll. 3-7). As such, the provisional objection under 37 CFR 1.75 is incorrect and withdrawal of the provisional objection is respectfully requested.

Claims 81-98 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Without acquiescing to the rejection, Applicants have amended independent claims 81, 87, and 93. Based upon the amendment made to the claims, withdrawal of the rejection is respectfully requested. A step of outputting in each of the independent claims produces a useful and tangible result in view of MPEP 2106 (IV)(C)(2)(B)(2)(a) and (b). "In making this determination, the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather on whether the final result achieved by the claimed invention is 'useful, tangible, and concrete." (MPEP 2106 (IV)(C)(2)(B)(2)). Applicants' independent claims produce a "real-world result." Applicants' dependent claims 82-

86, 87-92, and 94-98 overcome the rejection for at least the same reasons as their ultimate base claim.

Claims 81-83, 86-89, and 92 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Maarek et al. ("Emphemeral Document Clustering for Web Applications," IBM Research Report, RJ 10186, April 2000, hereinafter referred to as Maarek) in view of Call (U.S. Published App. No. 2002/0143521, hereinafter referred to as *Call*). Claims 84-85 and 90-91 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Maarek* in view of *Call* and further in view of Liddy et al. (U.S. Patent No. 5,873,056, hereinafter referred to as *Liddy*). Claims 93 and 95-98 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Maarek* in view of *Call* in view of *Liddy* and further in view of Dorocak (Dorocak et al. "Conditional Syntactic Specification," Proceedings of the Annual Conference, August 1973, pages 101-105, hereinafter referred to as *Dorocak*). Claim 94 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Maarek* in view of *Call* in view of *Liddy* in view of *Dorocak* and further in view of Anderson et al. (U.S. Pub. App. No. 2004/0010501, hereinafter referred to as *Anderson*). Applicants respectfully traverse.

Initially, Applicants note that *Anderson* is not prior art against any of the pending claims. Specifically, *Anderson* has a filing date of July 12, 2002. As noted in Applicants' originally filed Application Data Sheet on December 1, 2003, the present matter claims priority to U.S. App. Serial No. 09/761,188, filed January 18, 2001 (now issued U.S. Patent No. 6,766,316). As the *Anderson* reference does not include a priority date that precedes Applicants' filing date, withdrawal of the *Anderson* reference is respectfully requested. In addition, as admitted by the Action on page 14, the combination of *Maarek*, *Call*, *Liddy*, and *Dorocak* fails to teach or suggest each and every feature of Applicants' claim 94. As such, immediate allowance of the present claim 94 is respectfully requested.

In order to establish a *prima facie* case of obviousness under § 103(a), three criteria must exist: 1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings; 2) there must be a reasonable expectation of success; and 3) the

prior art reference(s) must teach or suggest all the claim limitations. *See* MPEP § 706.02 (j); *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

With respect to the third criterion, the combination of *Call* and *Maarek* fails to teach or suggest each and every feature of Applicants' claim 81. Applicants' claim 81 recites, among other features, "identifying at least one predicate and argument in said <u>set of document predicate structures</u>" (emphasis added). As admitted by the Action, *Maarek* fails to teach or suggest "by subtracting corresponding ones of said predicate keys" (Action, p. 7). In response, the Action relies on *Call* for support.

Under the *Call* system, "a sequence of one or more integers is used to represent the character data in natural language text, including the natural language text data in XML document" (P. 5, para. [0068]). *Call* fails to teach or suggest Applicants' claim 81 feature of, "estimating conceptual nearness of two of said document predicate structures in said set of document predicate structures by subtracting corresponding ones of said predicate keys." *Call* describes how ordered collections of items called "sets" may be created by query (filter) mechanisms and stored. (P. 5, para. [0071] and p. 1, para. [0117]). As with the previous non-final Office Action, in rejecting this feature, the Action fails to provide any evidence within *Call* or any other reference and merely states that, "it is inherent in Call's method that conceptual nearness is obtained by subtracting corresponding one of predicate keys." (Action, p. 8). With respect to *Call*, paragraph [0117] on page 11, as cited in the Action, provides numerous manners to generate a set of items. As described, all items of the same item type may be collected in one set, or may be collected based upon a common attribute. (P. 11, para. [0117]). The same paragraph [0117] states that, "[t]hese and other features of sets, and the mechanisms provided to create, sort, combine and process the members of such sets, will be described in more detail later."

However, none of the remaining paragraphs of *Call* or any other portion describes Applicants' feature of "estimating conceptual nearness of two of said document predicate structures in said set of document predicate structures by subtracting corresponding ones of said predicate keys." In fact, subtraction of integers is not described at all in *Call*. The fact that a

certain result or characteristic <u>may</u> occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, (Fed. Cir 1993). "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic <u>necessarily</u> flows from the teaching of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). See MPEP section 2112. Therefore, absent rationale or evidence tending to show inherency, it is not inherent in *Call*'s method that conceptual nearness is obtained by subtracting corresponding one of predicate keys as expressed in the Action. If such an inherency argument is maintained, Applicants again respectfully request evidence to support such a contention.

Still further, Applicants' claim 81 recites, among other features, "identifying at least one predicate and argument in said set of document predicate structures by a predicate key that is an integer representation." (Action, pp. 6-7). In rejecting these features, the Action relies on various portions of *Maarek*. *Maarek* fails to teach or suggest this feature.

The cited portions of *Maarek* describe an indexing unit that can be a single term, complex form, or lexical constructs (p. 5, para. 4) and a lexical affinity (p. 7, last para. To p. 8, first para.). However, neither the cited portions nor any other portion of *Maarek* describes "identifying at least one predicate and argument in said set of document predicate structures." *Maarek*, like *Call*, describes processing of natural language text, not identification and estimation based upon document predicate structures. As such, the combination of *Call* and *Maarek* fails to teach or suggest each and every feature of Applicants' claim 81.

Applicants' claim 87 includes similar features as recited above with respect to Applicants' claim 81. As such, claim 87 is allowable over the combination of *Call* and *Maarek* for at least similar reasons as stated above with respect to claim 81.

Dependent claims 82-83 and 88-89, which depend from claims 81 and 87, are allowable over the art of record for at least the same reasons as described above with reference to their ultimate base claim and further in view of the novel features recited therein. For example, Applicants' claim 86 recites, among other features, "wherein said set of document predicate

structures are representations of logical relationships between words in a sentence." *Maarek*, like *Call*, fails to teach or suggest such a feature.

Liddy fails to cure the deficiencies of *Call* and *Maarek* as noted above with respect to Applicants' claims 81 and 87. As such, Applicants' claims 84-85 and 90-91, which depend from claims 81 and 87, are allowable over the combination of references for at least the same reasons as their ultimate base claim and further in view of the novel features recited therein.

Applicants' claim 93 includes similar features as recited above with respect to Applicants' claims 81 and 87. *Dorocak* fails to cure the deficiencies of *Call*, *Maarek*, and *Liddy*, as described above with respect to Applicants' claims 81-92. As such, claim 93 is allowable over the combination of references for at least similar reasons as stated above with respect to claims 81-92. In addition, Applicants' claim 93 recites, among other features, "determining a fixed number of arguments q for vector construction." For support in rejecting this feature, the Action cites page 104 and lines 38-45 of *Dorocak* and states that this feature is "specified in [the] corresponding definition" (Action, p. 12). However, with respect to arguments, the "definition" in *Dorocak* merely states modifying "the specifications relating to the correspondence between the number of arguments in a procedure reference and the number of parameters in a procedure definition." (*Dorocak*, p. 104). Neither the cited portion nor any other portion of *Dorocak* recites Applicants' claim 93 feature of, "determining a fixed number of arguments q for vector construction." As such, Applicants' claim 93 is patentably distinct over the art of record for at least this additional reason.

Applicants' claims 94-98, which depend from claim 93, are allowable over the combination of references for at least the same reasons as their ultimate base claim and further in view of the novel features recited therein.

CONCLUSION

All rejections having been addressed, Applicants respectfully submit that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same. Should the Examiner find that a telephonic or personal interview would expedite passage to issue of the present application, the Examiner is encouraged to contact the undersigned attorney at the telephone number indicated below. Applicants look forward to passage to issue of the present application at the earliest convenience of the Office.

Respectfully submitted,
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